

PATENT
450100-02315**IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A data recording/reproducing apparatus designed to receive an input data and to generate an output data, comprising:

a plurality of record media that are random-accessible, in which each of said plurality of record media is operable to store therein at least two different types of data, each type of data being stored in a respective circumferential area of the media that is radially allocated;

recording and reproducing means for recording and reproducing data to and from said plurality of record media; and

a plurality of input and output processing means for accessing said recording and reproducing means on time division basis, outputting said at least two different types of data that are received as input from outside the data recording/reproducing apparatus to said recording and reproducing means, and outputting the input data after processing the same,

wherein each of said plurality of input and output processing means has:

input means for outputting record area information and the data that is input from the outside to said reproducing and reproducing means so that the data is recorded to predetermined areas of said plurality of record media corresponding to the different types of data, and

wherein said recording and reproducing means record the different types of data to the predetermined areas of said plurality of record media corresponding to the record area information that is output from said input means;

PATENT
450100-02315

wherein each of said random accessible record media is operable to store at least two different types of data thereby storing a higher quantity of data within each of said plurality of randomly accessible record media than storing only a single type of data therein.

2. (Original) The data recording and reproducing apparatus as set forth in claim 1, wherein the different types of data are video data and audio data.

3. (Previously Presented) The data recording and reproducing apparatus as set forth in claim 1,

wherein the record area information is information representing an address of a record start position and an address of a record end position of one of said plurality of record media.

4. (Currently Amended) A data recording and reproducing method for accessing recording and reproducing means, outputting data to the recording and reproducing means, inputting reproduced data that is output from the recording and reproducing means, and outputting the data to the outside, the recording and reproducing means recording and reproducing the data to a record medium that is random-accessible on time division basis, the data containing different types of data that are input from the outside, the method comprising the steps of:

outputting record area information and the data to the recording and reproducing means so that the different types of data are recorded to predetermined areas of the record medium, each type of data being recorded in a respective circumferential area of the media that is radially allocated;

PATENT
450100-02315

recording the different types of data to the predetermined areas of the record medium corresponding to the record area information that is output to the recording and reproducing means at the outputting step ; and

reproducing the different types of data from the predetermined areas of the record medium, outputting the different types of data on time division basis, and outputting them to the outside;

wherein the record medium is operable to store at least two different types of data thereby storing a higher quantity of data in the randomly accessible record medium than storing only a single type of data therein.

5. (Original) The data recording and reproducing method as set forth in claim 4, wherein the different types of data are video data and audio data.

6. (Original) The data recording and reproducing method as set forth in claim 4, wherein the record area information is information representing an address of a record start position and an address of a record end position of the record medium.

7. (Currently Amended) A data recording apparatus, comprising:
a record medium that is random-accessible and which is operable to store therein at least two different types of data, each type of data being stored in a respective circumferential area of the media that is radially allocated;

recording means for recording data to said record medium; and

PATENT
450100-02315

a plurality of output processing means for accessing said recording means on time division basis and outputting said at least two different types of data that are input from the outside to said recording means,

wherein each of said output processing means has:

input means for outputting record area information and the data to said recording means so that the different types of data are recorded to predetermined areas of said record medium, and

wherein said recording means records the different types of data to the predetermined areas corresponding to the record area information that is output from said input means;

wherein the record medium is operable to store at least two different types of data thereby storing a higher quantity of data in the randomly accessible record medium than storing only a single type of data therein.

8. (Original) The data recording apparatus as set forth in claim 7,
wherein the different types of data are video data and audio data.

9. (Original) The data recording apparatus as set forth in claim 7,
wherein the record area information is information representing an address of a record start position and an address of a record end position of said record medium.

10. (Currently Amended) A data recording method for accessing recording and reproducing means, outputting data to the recording and reproducing means, and recording the data to the recording and reproducing means, the recording and reproducing means recording the data to a record medium that is random-accessible on time division basis, the data containing different types of data that are input from the outside, the method comprising the steps of:

PATENT
450100-02315

outputting record area information and the data to the recording and reproducing means so that the different types of data are recorded to predetermined areas of the record medium, each type of data being recorded in a respective circumferential area of the media that is radially allocated; and

recording the different types of data to the predetermined areas of the record medium corresponding to the record area information that is output to the recording and reproducing means at the outputting step;

wherein the record medium is operable to store at least two different types of data thereby storing a higher quantity of data in the randomly accessible record medium than storing only a single type of data therein.

11. (Original) The data recording and reproducing method as set forth in claim 10, wherein the different types of data are video data and audio data.

12. (Original) The data recording and reproducing method as set forth in claim 10, wherein the record area information is information representing an address of a record start position and an address of a record end position of the record medium.

13. (Currently Amended) A data recording and reproducing apparatus, comprising:
a record medium that is random-accessible and which is operable to store therein at least two different types of data, each type of data being stored in a respective circumferential area of the media that is radially allocated;

recording and reproducing means for recording and reproducing the data to and from said record medium, the data containing video data and audio data; and

PATENT
450100-02315

a plurality of input and output processing means for accessing said recording and reproducing means on time division basis, outputting data that is input from the outside to said recording and reproducing means, inputting data reproduced by said recording and reproducing means, and outputting the data to the outside,

wherein each of said input and output processing means has:

input means for changing the divide ratio of a record area for video data and a record area for audio data of said record medium corresponding to at least the data that is input from the outside and outputting record area information and the data to said recording and reproducing means so that the video data and the audio data are recorded to predetermined areas of the record medium, and

wherein said recording and reproducing means records the data to the predetermined areas of the record medium corresponding to the record area information that is output from said input means, reproduces the data from said record medium, and outputs the reproduced data to each of said input and output processing means on time division basis;

wherein the record medium is operable to store at least two different types of data thereby storing a higher quantity of data in the randomly accessible record medium than storing only a single type of data therein.

14. (Original) The data recoding and reproducing apparatus as set forth in claim 13, wherein each of said input and output processing means changes the divide ratio corresponding to the transmission rate of the video data that is input from the outside and the number of channels of the audio data.

15. (Original) The data recoding and reproducing apparatus as set forth in claim 14,

PATENT
450100-02315

wherein said record medium that is random-accessible is a disc shaped record medium,
and

wherein each of said input and output processing means changes the divide ratio corresponding to a recording method of RAID for the audio data along with the transmission rate of the video data and the number of channels of the audio data.

16. (Original) The data recoding and reproducing apparatus as set forth in claim 13, wherein the record area information is information representing an address of a record start position and an address of a record end position of said record medium.

17. (Currently Amended) A data recording and reproducing method for accessing according and reproducing means, outputting data to the recording and producing means, inputting reproduced data that is output from the recording and reproducing means, and outputting the data to the outside, the recoding and reproducing means recording and reproducing the data to and from a record medium that is random-accessible, the data containing video data and audio data that are input from the outside, the method comprising the steps of:

changing the divide ratio of a record area for the video data and a record area for the audio data on the record medium corresponding to at least the data that is input from the outside and outputting record area information and the data to the recording and reproducing means so that the video data and the audio data are recorded to different record areas of the record medium, each in a respective circumferential area of the media that is radially allocated;

recording the video data and the audio data to the different record areas of the record medium corresponding to the record area information that is output to the recording and reproducing means at the changing step; and

PATENT
450100-02315

reproducing the data from the record medium and outputting the reproduced data to each of input and output processing means;

wherein the record medium is operable to store at least two different types of data resulting in more data being stored in the randomly accessible record medium than storing only a single type of data therein.

18. (Previously Presented) The data recording and reproducing method as set forth in claim 17,

wherein the changing step is performed by changing the divide ratio corresponding to the transmission rate of the video data that is input from the outside and the number of channels of the audio data.

19. (Previously Presented) The data recording and reproducing method as set forth in claim 18,

wherein the record medium that is random-accessible is a disc shaped record medium, and

wherein the changing step is performed by changing the divide ratio corresponding to a recording method of RAID for the audio data along with the transmission rate of the video data and the number of channels of the audio data.

20. (Original) The data recording and reproducing method as set forth in claim 17,

wherein the record area information is information representing an address of a record start position and an address of a record end position of the record medium.

PATENT
450100-02315

21. (Currently Amended) A data recording apparatus, comprising:

a record medium that is random-accessible and which is operable to store therein at least two different types of data, each type of data being stored in a respective circumferential area of the media that is radially allocated;

recording means for recording the data that contains at least video data and audio data to said record medium;

a plurality of input and output processing means for accessing said recording means on time division basis and outputting data that is input from the outside to said recording means,

wherein each of said input and output processing means has:

input means for changing the divide ratio of a record area for the video data and a record area for the audio data of said record medium corresponding to at least the data that is input from the outside and outputting record area information and the data to said recording means so that the video data and the audio data are recorded to different record areas of said record medium, and

wherein said recording means records the data to the different record areas of said record medium corresponding to the record area information that is output from said input means;

wherein the record medium is operable to store at least two different types of data resulting in more data being stored within the randomly accessible record medium than storing only a single type of data therein.

22. (Original) The data recording apparatus as set forth in claim 21,

wherein each of said input and output processing means changes the divide ratio corresponding to the transmission rate of the video data that is input from the outside and the number of channels of the audio data.

PATENT
450100-02315

23. (Original) The data recording apparatus as set forth in claim 22,
wherein said record medium that is random-accessible is a disc shaped record medium,
and wherein each of said input and output processing means changes the divide ratio
corresponding to a recording method of RAID for the audio data along with the transmission rate
of the video data and the number of channels of the audio data.

24. (Original) The data recording apparatus as set forth in claim 21,
wherein the record area information is information representing an address of a record
start position and an address of a record end position of said record medium.

25. (Currently Amended) A data recording method for accessing recording means,
outputting data to the recording means, and recording the data, the recording means recording the
data to a record medium that is random-accessible on the time division basis, the data containing
video data and audio data that are input from the outside, the method comprising the steps of:

changing the divide ratio of a record area for video data and a record area for audio data
of the record medium corresponding to at least the data that is input from the outside and
outputting record area information and the data to the recording means so that the video data and
the audio data are recorded to the different record areas of the record medium, each in a
respective circumferential area of the media that is radially allocated; and

recoding the video data and the audio data to the different record areas of the record
medium corresponding to the record area information that is output to the recording means at
step (a) ;

PATENT
450100-02315

wherein the record medium is operable to store at least two different types of data resulting in more data being stored within the randomly accessible record medium than storing only a single type of data therein.

26. (Previously Presented) The data recording method as set forth in claim 25, wherein the changing step is performed by changing the divide ratio corresponding to the transmission rate of the video data that is input from the outside and the number of channels of the audio data.

27. (Previously Presented) The data recording method as set forth in claim 26, wherein the record medium that is random-accessible is a disc shaped record medium, and wherein the changing step is performed by changing the divide ratio corresponding to a recording method of RAID for the audio data along with the transmission rate of the video data and the number of channels of the audio data.

28. (Original) The data recording method as set forth in claim 25, wherein the record area information is information representing an address of a record start position and an address of a record end position of the record medium.

29 - 56. (Canceled)